



Advanced Seismic Instrumentation & Research

AG4.5

P/N 100018



MidLine gimbaled 4.5 Hz deep borehole seismometer

The AG4.5 is ASIR's readily deployed deep borehole 3-component seismometer for use in microearthquake detection and monitoring. It is designed for up to 3000 m depths in NQ 3" (76 mm) boreholes with tilts of up to 15°. Features the highest current performance level in sensitivity, reliability, and longevity.



Features

- > slim 61 mm outer diameter (OD)
- > passive sensors on damped gimbal
- > high tilt tolerance of up to 15°
- > for permanent or temporary installations

Sensor Parameters

Coil Resistance	3400 Ohms $\pm$ 10 %
Depth Range	0 - 3000 m
Distortion	< 0.3 %
Max Motion p-p	4 mm
Moving Mass	11.3 g
Natural Frequency	4.5 $\pm$ 0.5 Hz
Damping	0.58 $\pm$ 20 %
Operating Temperature	-40 to +70 °C
Sensitivity	82 V/m/s $\pm$ 7.5 %
Sensor Type	3 component - gimbaled
Tilt Tolerance	15°

Sonde Dimensions

Height	781 mm
Outer Diameter	61 mm
Weight	8 kg

Cable

Delivered standard with 3 twisted shielded pairs, 400 kg Kevlar core, non-armored. Can be supplied with cable to meet customer specified requirements and length.